

# MOBILE ELECTRIC POWER HANDBOOK

## APPENDIX A

### 3 kW Tactical Quiet Generator Set (TQG)

Identification Data		
Description	3 kW TQG Set, 60 Hz, DED, Skid Mtd	3 kW TQG, 400 Hz, DED, Skid Mtd
Model	MEP-831A	MEP-832A
NSN	6115-01-285-3012	6115-01-287-2431
LIN	G18358	G74847
SSN	M58101	M53601
Trailer mounted configurations	PP-AN/MJQ-43, FIG A-3 (kit to convert to PP-AN/MJQ-32 include racks and reels)	None

Physical Characteristics	
Dimensions: LWH (in) (Cube)	35 x 28 x 27 (15 ft <sup>3</sup> )
Weight (lbs.)	326 (full tank + battery), 272 (1 hr fuel, no battery)
Engine: Yanmar L-70AE-D/DE Diesel, 1 cylinder/4 stroke, 6.7 hp @ 3600 RPM (variable speed), rope and 24 VDC start, air-cooled.	
Instrumentation: Emergency stop, Fuel level, Hour meter, Voltmeter, Frequency meter, Battle short, AC interrupt, Fault indicators	
Fuels: Diesel DL-1, DL-2; Jet Fuel JP-8; Fuel tank: 4.0 gal.	

Performance Characteristics	
Power Rating: 3 kW, 0.8 pf @ 4000 ft/95 °F. 110% max power.	
Environmental Capability: -25 °F to 120 °F, Rain, humidity, altitude, sand/dust, transportation, 3 foot drop, vibration, cold storage, salt spray, fungus, 15° incline.	
Protective Devices: Over-speed, High temp, Low oil pressure, Low fuel, Over-voltage, Short circuit, Overload	
Fuel consumption: 0.33 gph @ rated load	
Human Factors: MIL-STD-1474. Man portable. Noise: 70 dBA @ 7 m (23 ft.)	
Reliability: 500 hr MTBF @ 80% Lower Confidence Level (LCL)	
Maintenance ratio:	

Electrical Characteristics			
Connection	120/240V, 1ph, 3 wire	120V, 1ph, 2 wire	240V, 1ph, 2 wire
Volt adj range	228 – 252 V	114 – 126 V	228 – 252 V
Freq adj range	± 3%		
Electrical: Permanent Magnet Variable Speed Generator, TRC Corp Solid State Inverter (60Hz and 400Hz).			

Electrical Performance		
Electric Power Quality	AC Voltage	Frequency
Regulation	4%	3%
Short term steady state stability (30 sec)	2% bandwidth	4% bandwidth
Long term steady state stability (4 hr)	4% bandwidth	4% bandwidth
Application/rejection of rated load recovery	30% dip/rise 3 sec	4% under/5% over 4 sec/6 sec
Motor load	Not rated	
Max waveform deviation factor	7%	
Individual waveform harmonic	4%	
EMI: Meets MIL-STD-461	EMP: HAEMP IAW MIL-STD-2169	

FIGURE A-2 3 kW Tactical Quiet Generator Set

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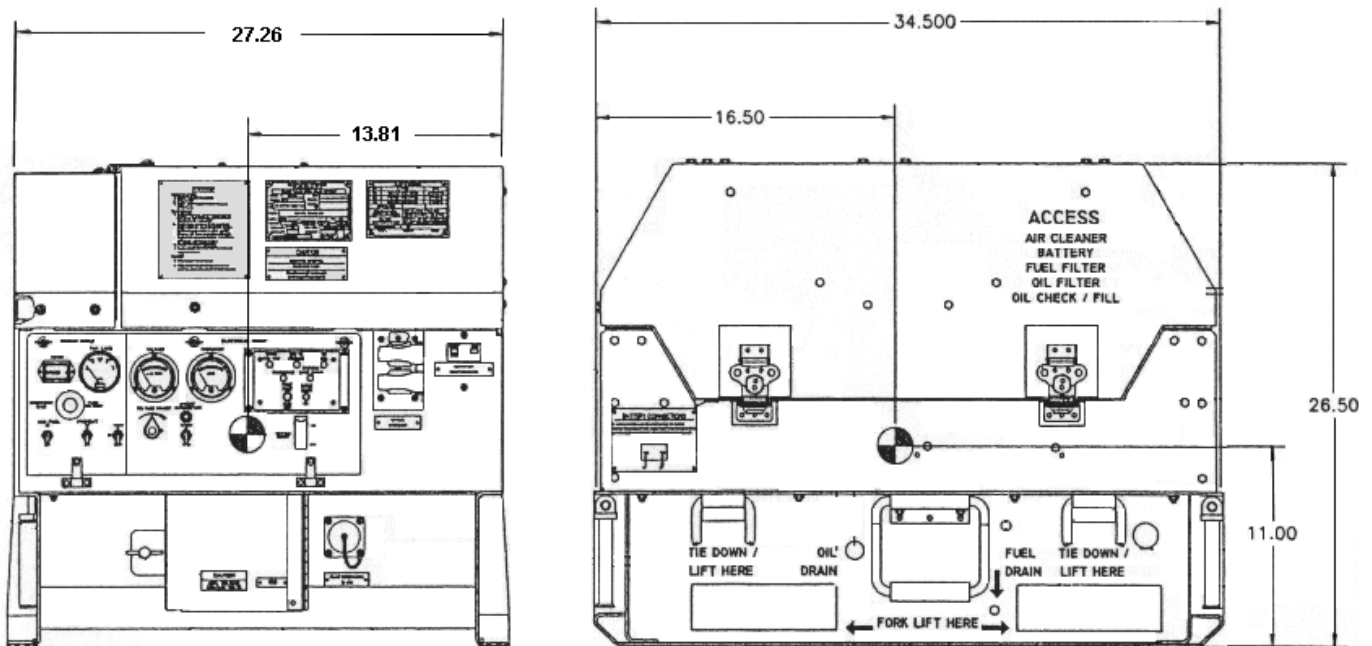
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Optional Equipment			
Description	NSN	Weight (lbs.)	Effect on Dimensions (in)
None			

Technical Manuals				
	Army	Air Force	Marine Corps	Navy
Operator, Unit, DS, GS	TM 9-6115-639-14			



MEP-832A (400 Hz)



MEP-831A (60 Hz) has convenience outlet and fault protection  
Radius of door is 25.4"

FIGURE A-2 3 kW Tactical Quiet Generator Set